

**Amendments to the Claims:**

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-61 (Previously Cancelled)

62. (Previously Presented) A photoluminescent device comprising:
- a) an excitation source; and
  - b) at least a first layer of photoluminescent phosphor particles adapted to be stimulated by said excitation source and which are selected from the group consisting of  $\text{Y}_2\text{O}_3:\text{Eu}$ ,  $(\text{Y}, \text{Gd})\text{BO}_3:\text{Eu}$ ,  $\text{Zn}_2\text{SiO}_4:\text{Mn}$ , barium aluminate and doped barium magnesium aluminate, wherein said phosphor particles have a weight average particle size of from about  $0.1\text{ }\mu\text{m}$  to about  $10\text{ }\mu\text{m}$ , a substantially spherical morphology and wherein at least about 80 weight percent of said particles are not larger than two times said average particle size.
63. (Original) A photoluminescent device as recited in Claim 62, wherein said phosphor particles have an average size of from about  $0.3\text{ }\mu\text{m}$  to about  $5\text{ }\mu\text{m}$ .
64. (Original) A photoluminescent device as recited in Claim 62, wherein said excitation source comprises a gas and wherein said gas comprises xenon.
65. (Original) A photoluminescent device as recited in Claim 62, wherein said excitation source comprises a gas and wherein said gas comprises mercury.
66. (Original) A photoluminescent device as recited in Claim 62, wherein said particles comprise  $\text{Y}_2\text{O}_3:\text{Eu}$ .
67. (Original) A photoluminescent device as recited in Claim 62, wherein said particles comprise  $(\text{Y}, \text{Gd})\text{BO}_3:\text{Eu}$ .
68. (Original) A photoluminescent device as recited in Claim 62, wherein said particles comprise  $\text{Zn}_2\text{SiO}_4:\text{Mn}$ .
69. (Previously Presented) A photoluminescent device as recited in Claim 62, wherein said particles comprise barium magnesium aluminate doped with Eu.

70. (Previously Presented) A photoluminescent device as recited in Claim 62, wherein said particles comprise barium aluminate.

71. (Previously Presented) A photoluminescent device as recited in Claim 62, wherein said particles comprise barium magnesium aluminate doped with Mn.

72. (Original) A photoluminescent device as recited in Claim 62, wherein said layer is a substantially uniform layer of photoluminescent phosphor particles, said layer having an average thickness of not greater than about three times said average particle size.

73. (Original) A photoluminescent device as recited in Claim 62, wherein said device is a plasma display panel.

74. (Original) A photoluminescent device as recited in Claim 62, wherein said device is a fluorescent lamp.

75. (Original) A photoluminescent device as recited in Claim 62, wherein said device is an LCD backlight.

76. (Previously Presented) A plasma display panel, comprising:

- a) a rear panel comprising a plurality of row electrodes;
- b) a front panel comprising a plurality of column electrodes, wherein said row electrodes and said column electrodes are in perpendicular relation to form a plurality of addressable x-y coordinates;

- c) a photoluminescent phosphor powder dispersed on a substrate disposed between said electrodes, wherein said phosphor powder comprises particles having a host material selected from the group consisting of oxides, silicates, aluminates and borates, and having a substantially spherical morphology, a weight average particle size of not greater than about 5  $\mu\text{m}$  and a particle size distribution wherein at least about 80 weight percent of said particles are not larger than two times said average particle size.

77. (Previously Cancelled).

78. (Original) A plasma display panel as recited in Claim 76, wherein said average particle size is from about 0.3  $\mu\text{m}$  to about 5  $\mu\text{m}$ .

79. (Original) A plasma display panel as recited in Claim 76, wherein said

particles have a particle size distribution wherein at least about 90 weight percent of said particles are not larger than about two times said weight average particle size.

80. (Original) A plasma display panel as recited in Claim 76, wherein said phosphor particles comprise crystallites having an average crystallite size of at least about 25 nanometers.

81. (Original) A plasma display panel as recited in Claim 76, wherein said phosphor powder is dispersed in a substantially uniform layer having an average thickness of not greater than about three times said average particle size.

82. (Previously Presented) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises barium magnesium aluminate doped with Eu.

83. (Previously Presented) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises barium magnesium aluminate and from about 8 to about 12 atomic percent Eu and wherein said plasma display panel comprises xenon gas as an excitation source.

84. (Previously Presented) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises barium aluminate doped with Mn.

85. (Previously Presented) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises barium aluminate and from about 8 to about 12 atomic percent Mn and wherein said plasma display panel comprises xenon gas as an excitation source.

86. (Original) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises  $\text{Zn}_2\text{SiO}_4\text{:Mn}$ .

87. (Previously Presented) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises  $\text{Zn}_2\text{SiO}_4$  and from about 0.05 to about 2 atomic percent Mn and wherein said plasma display panel comprises xenon gas as an excitation source.

88. (Original) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises  $\text{Y}_2\text{O}_3\text{:Eu}$ .

89. (Previously Presented) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises  $\text{Y}_2\text{O}_3$  and from about 4 to about 6 atomic percent

Eu and wherein said plasma display panel comprises xenon gas as an excitation source.

90. (Original) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises (Y,Gd)BO<sub>3</sub>:Eu.

91. (Previously Presented) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises (Y,Gd)BO<sub>3</sub> and from about 14 to about 20 atomic percent Eu and wherein said plasma display panel comprises xenon gas as an excitation source.

92. (Previously Presented) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises:

- a) first phosphor particles of barium magnesium aluminate doped with Eu;
- b) second phosphor particles selected from the group consisting of Zn<sub>2</sub>SiO<sub>4</sub>:Mn, barium aluminate doped with Mn and mixtures thereof; and
- c) third phosphor particles selected from the group consisting of Y<sub>2</sub>O<sub>3</sub>:Eu, (Y,Gd)BO<sub>3</sub>:Eu and mixtures thereof.

Claims 93-205 (Previously Cancelled)